# Satellite Broadcasting and Communications Association of America

Officers.

President

Chairman Hai Haley Davis Antenna, Inc.

1st Vice Chairman Daniel M. Zinn Hughes Communications, Inc

2nd Vice Chairmen. Stephen Wm. Schulte SHOWTIME/ THE MOVIE CHANNEL Inc.

Past Chairman H. Taylor Howard Chaperral Communications, Inc.

Directors.

Donald Borg Channel Master

Edwin (Ned) Van Hamm Christian Broadcasting Network, Inc.

Edward E. Reinhart COMBAT Corporation

William E. Berman GE American Communications, Inc.

Larry Dunham General Instrument Corp.

Robert N. Caird Home Box Office, Inc.

Gordon Main Main Electronics Co.

Stephen L. Serafin Signal Sources, inc.

Plik Hawtins Starpath of Hardin County

Stanley E. Hubbard, II USSB, Inc.

Cecil W. (Jack) Filley United Video, inc.

Raiph Warren Warren Supply Co.

John Schweizer Winegerd Co.

Staff

Vice President -Government Affairs/ General Counsel Mark C. Ellison

Vice President of Operations Carry Fischette RECEIVED

1:07 20 1688

November 30, 1988

Mr. H. Walter Feaster, III
Acting Secretary
Office of the Secretary
Federal Communications Commission
Washington, D.C. 20554

Federal-Communications Commission Office of the Secretary

Dear Mr. Feaster:

Enclosed please find one original and ten copies of the comments of the Satellite Broadcasting and Communications Association (SBCA) on MM Docket 87-268 (pursuant to the Tentative Decision and Notice of Further Inquiry). Please return one copy of our comments with the FCC's "filed" stamp affixed on it.

Should you have any questions, please feel free to give me a call.

Sincerely,

Mark C. Ellison Vice President

Government Affairs and General Counsel

Oth

RECEIVED

NUA 2 U 1888

Before the Federal Communications Commission 20554 Washington, D.C.

Federal-Communications Commission Office of the Secretary

In the Matter of

Advanced Television Systems and Their Impact on the Existing Television Broadcast Service

Review of Technical and Operational Requirements Part 73-E, Television Broadcast Stations

Reevaluation of the UHF Television Channel and Distance Separation Requirements of Part 73 of the Commission's Rules

MM Docket No. 87-268

## COMMENTS OF THE SATELLITE BROADCASTING AND

### COMMUNICATIONS ASSOCIATION (SBCA)

The SBCA on behalf of itself and its members. pursuant to the <u>Tentative Decision and Further Notice of Inquiry</u>, FCC 88-288, released September 1, 1988 ("Tentative Decision"), hereby provides its comments in the above-captioned proceeding.

## Introduction.

is the third pleading filed by the SBCA in this docket. Throughout the process, the association's pleadings have stressed two fundamental goals: preserving 12.2 - 12.7 GHz spectrum for high powered direct broadcast satellite service (DBS) and preventing the adoption of standards which might impair the ability of DBS to maximize its potential for the delivery of advanced television service (ATV).

In formulating the Tentative Decision, the Commission had considerable data before it. Not only did it have the comments of some seventy parties, but the collected information of the FCC Advisory Committee on Advanced Television as well. It is the opinion of the SBCA that the Tentative Decision reached is well founded and should be made permanent. The SBCA particularly applauds the recognition of the importance of preserving the full allocation of the 12 GHz DBS band and the decision to limit the application of mandatory standards to terrestrial broadcasting service.

As the Commission is now well aware, there are a number of systems which will permit the delivery of ATV within the existing VHF and UHF spectrum, as discussed more fully below. Disturbing the allocation of frequency bands outside the VHF and UHF bands is unnecessary, undesirable from a public interest point of view, and technologically unsound. Likewise, the Commission's decision to limit the application of ATV standards to terrestrial broadcasting will protect the consumer while permitting DBS to develop fully and utilize the full scope of its spectrum for ATV.

The Association would also note that the Commission's comments pertaining to the development of DBS service and its need to have all of the 12 GHz band at its disposal are accurate. The members of the SBCA, which includes a number of DBS authority applicants/permittees, are confident that the coming decade will see the launch of the first DBS systems for the delivery of programming to consumers in rural and underserved areas. And, unlike terrestrial broadcasting, there are

obviously no questions about the technological feasibility of the 12 GHz for DBS applications.

On the basis of the arguments set forth below, the SBCA urges the adoption of the Tentative Decision as a final and permanent decision.

# Spectrum To Be Considered for ATV.

The SBCA strongly supports the Commission's Tentative Decision (at paragraphs 75 - 80) to allot supplemental spectrum only within the existing VHF and UHF television allocation to provide for possible ATV transmission in terrestrial broadcasting, and its intention not to consider spectrum outside these bands.

Although the SBCA is not prepared to comment on the problems cited by the Commission in connection with the 4.4-4.49 GHz and 7.75-7.9 GHz bands (paragraph 77), we agree completely with the Commission's reasons for not considering the reallocation of all or part of the DBS band at 12.2-12.7 GHz for terrestrial ATV transmission.

As noted in paragraph 78, the Commission has granted a number of permits for DBS service, and a number of other parties have applied for DBS authorization. The permittees have complied with the Commission's due diligence requirements, and the applicants are prepared to do so. Indeed, the Commission has just granted an exemption extending by four years the launch deadlines of two of the early permittees while

acknowledging that the failure of these permittees to meet their original 1988 launch dates reflected no lack of effort on their parts. (United States Satellite Broadcasting Co., Inc. - FCC 88-383, Released November 29, 1988.)

The fact is that the band 12.2-12.7 GHz is currently the only band in the entire radio spectrum in which a viable DBS service for the United States is possible, and the combination of existing permittees and new applications already requires more spectrum and orbital slots than are available in this band. Even absent the insurmountable technical problems that terrestrial broadcasting would face at 12 GHz (as summarized at paragraphs 79 and 80), no part of the DBS band could be reallocated exclusively for terrestrial ATV without destroying the possibility of accommodating the existing permittees and applicants, both collectively and, in some cases, individually. The same conclusion applies to the possibility of reallocating a part of the DBS band for terrestrial broadcasting on a shared basis since, as acknowledged by the Commission (at paragraph 78), shared frequency operation is not technically feasible.

SBCA concurs with the Commission's observation (at paragraph 80) regarding the technical and economical infeasibility of using the 12 GHz band to provide augmentation channels for two-channel ATV systems whose base channels are in the VHF or UHF bands. Terrestrial broadcasting experts have recently acknowledged that such a two-channel arrangement is infeasible and therefore have only advocated the use of the 12 GHz band for independent single-channel "simulcast" ATV signals. However,

all of the technical and economic problems associated with 12 GHz terrestrial broadcasting remain and make simulcasting at 12 GHz only marginally more feasible than augmentation.

Fortunately, recent progress in the development of ATV emission formats (as reported to the Systems Analysis Working Party on the Systems Subcommittee of the FCC's Advisory Committee on Advanced Television Services during the week 14-18 November 1988) show that it is not necessary to turn to the 12 GHz DBS band or to any other frequency band above 1 GHz to accommodate terrestrial ATV. Based on analyses presented to the Systems Analysis Working Party, it is believed that by using either an NTSC-compatible two-channel format with a 3 MHz augmentation channel or a separate 6 MHz simulcast ATV format, all present terrestrial broadcast stations will be able to offer both NTSC and ATV transmissions using only the existing VHF and UHF allocations.

As the Commission observed (at paragraph 78), DBS may be used today for ATV as well as conventional broadcast services. It is significant that in all other countries of the world, ATV is to be first introduced on DBS, and in most countries, there are no current plans for a terrestrial ATV broadcast service. SBCA is not arguing that the United States should follow this lead and restrict ATV to DBS. On the contrary, SBCA recognizes the unique character of terrestrial broadcasting in the United States and fully supports that industry's effort to introduce a terrestrial ATV service. However, it is neither necessary, desirable, nor technically feasible to deny the United States the possibility of a viable satellite ATV service in order to accommodate terrestrial ATV.

SBCA asks only that the availability of the full 12 GHz DBS band that is essential to the birth and growth of DBS and for the introduction of satellite-delivered ATV service to the United States not be left in doubt by further consideration of any possible reallocation of the 12 GHz DBS band. Therefore, we urge the Commission to make final its tentative decision to consider only the VHF and UHF television bands for terrestrial ATV broadcasting.

# Standards for ATV

SBCA supports the Commission's tentative decision to limit its mandatory standards-setting to the terrestrial broadcasting service. It would be contrary to the public interest for the Commission to adopt an ATV format or impose compatibility requirements for satellite distribution of video. Moreover, the future generation of TV sets will, in all likelihood, incorporate interface connectors to allow the display of both broadcast ATV and ATV delivered by satellite.

The marketplace will work to assure that some minimum level of compatibility exists between broadcast ATV and other media ATV. There is no need for a Commission requirement here, since satellites and other transmission media often serve as input or relay facilities for broadcast stations. The marketplace will assure that alternate media such as satellite are sufficiently compatible with broadcast ATV so that they can continue to serve as input and relay facilities for broadcast stations.

In addition, TV receivers in the future will be designed as receiver/monitors. They will receive RF broadcast ATV signals in the format adopted by the Commission, and also accept baseband video signals. We understand that the Commission's ATV Advisory Committee has a working party that has prepared an initial draft of specifications for an interface connector related to the EIA IS-15 interface to serve this purpose.

TV receiver manufacturers depend on economies of scale in production to achieve low costs, and this factor will act as a driving force to assure compatibility. We do not expect to see the development of specialized ATV receivers that only work with satellite-delivered video. Consumers are unlikely to buy multiple TV receivers in order to watch advanced TV formats from different transmission media. Thus, we expect satellite TV broadcasters to employ ATV formats that can be easily displayed on the receiver/monitors that are sold to consumers.

In summary, there is no need for Commission to adopt an ATV standard Satellite ATV formats will be tested and for satellite broadcasting. adopted based on technical and economic decisions in the marketplace. The Commission should not interfere with this process. These formats will incorporate features that make particular use of the characteristics of satellite transmission to provide the best possible picture to viewers. At the same time, they will be viewable on the receivers that are available to consumers. In this way, consumers will have the advantage of a choice of transmission media while only needing

a single display device. Again, we urge the Commission to make permanent its Tentative Decision as it relates to standards for ATV.

# Conclusion

For the foregoing reasons, the SBCA respectfully submits that the Commission should issue a final decision in this docket making the findings of the Tentative Decision as they relate to spectrum and standards permanent.

Respectfully Submitted By:

Mark C. Ellison Vice President

Government Affairs and

General Counsel

E. E. Reinhart

Chairman, SBCA Technical

Committee

Jeffrey A. Krauss, Ph.D.

SBCA Technical Committee